



CS-300G MH

USER MANUAL



Please read this manual carefully before use!

ENGLISH INDEX

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1. Open the box and checking

Congratulations on choosing our products! Please carefully read this instruction manual in its entirety and keep it well for using reference. This manual contained about the installation and the relative using information of this products. Please according to this manual's relative speaking when using this equipment.

This equipment was made of new style, high intensity plastic and cast aluminium. It fully shows the modern times light characteristic with beauty structure. And it was made according to CE standard. Fully up the international standard of DMX512 agreement. Master or slave in phase control. Can be use in large entertainment, theater, performing and playing hall, etc.

When receiving this product please carefully bring and put; and check that whether this equipment has been damaged or not during transportation. And please also check the following thing was enclosed:

Laser light 1PC	3 pin signal line 1PC
User manual 1PC	Power cable 1PC
Safety string 1PC	Hanging bracket 2 PCS

2. Safety instructions

Every person involved with installation and maintenance of this device have to:

- be qualified
- follow the instructions of this manual

CAUTION:

- Keep this device away from rain and moisture!
- Unplug mains lead before opening the housing!
- **FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIAL START - UP!**
- Be careful with your operations.
- With a high voltage you can suffer a dangerous electric shock when touching the wires!
- This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Important:

- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.
- Please consider that damages caused by manual modifications to the device are not subject to warranty.
- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Make sure that the available voltage is not higher than stated on the rear panel.
- Always plug in the power plug least. Make sure that the power-switch is set to OFF-position before you connect the device to the mains. The power-plug has to be accessible after installing the device.
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the

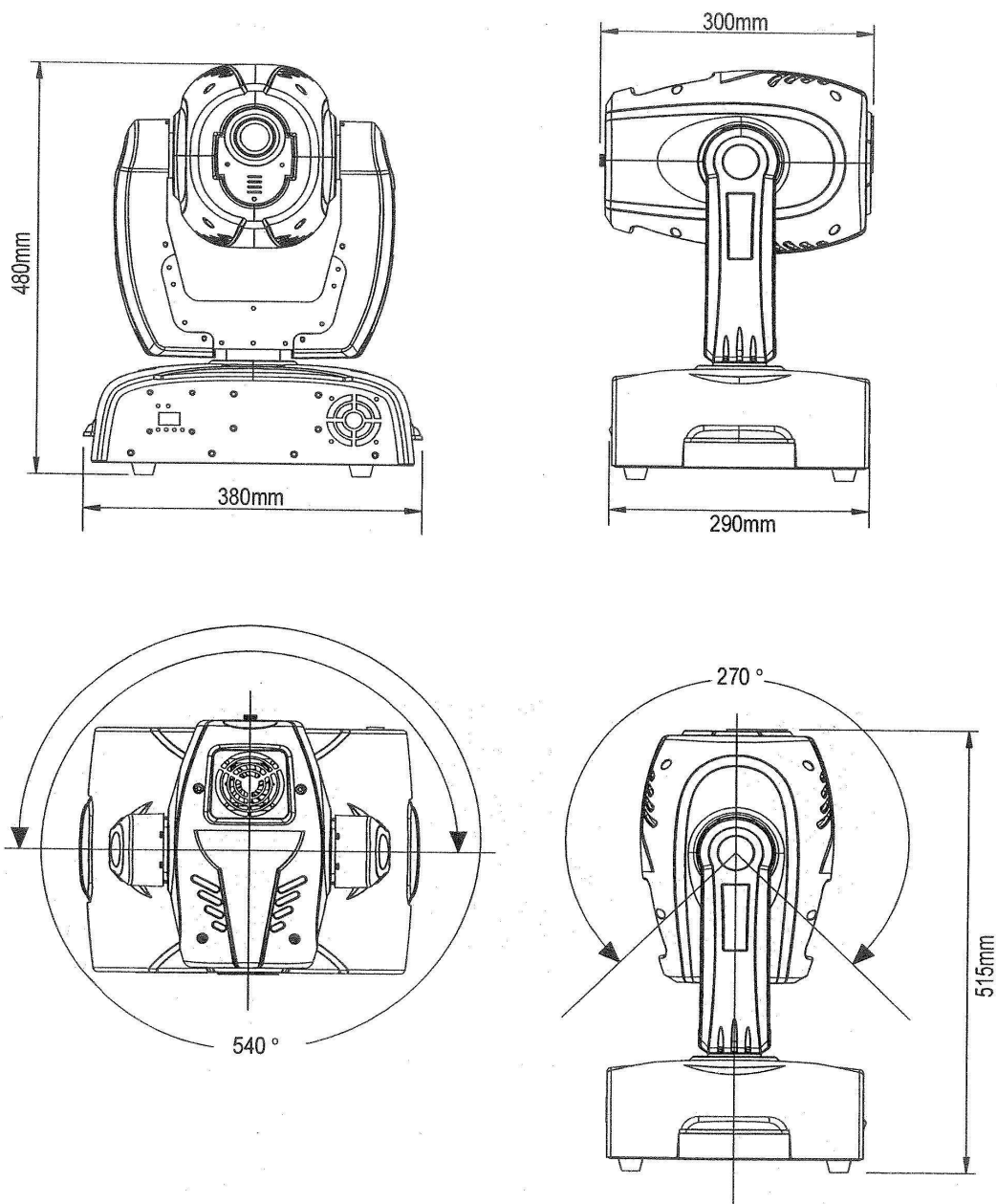
3.Attention

1. Must operate according to the user manual. Don't separate the light personally.
Call the technician when the machine breaks down.
2. Please do not see the laser beam directly to avoid any damage.
3. Before connect or disconnect the power, please adjust the luminance of the laser diode to the least to avoid any damage to the laser diode.
4. This unit should be keep dry, do not use in the rain or dank and dusty environment.
It can be use in the outdoor with the water-proof cover protector.
5. Set the light immobility and try to avoid strong shake or hit.
6. Prevent dust into the equipment to avoid problems.
7. Please keep that there's no other equipment or decorating materials obstructed the exhaust fan and the vent-pipe when the equipment was working.
8. Before connect power, check the plug is immobility or not, power line should be connect well.
9. Please do not open or close the equipment frequently that's to avoid any affect to the life span of the laser diode, and try the best to avoid the long time working.
10. Due to the characteristic of the laser diode, after three hours working, it should be close at least 25 minutes until the laser diode cooling then work again.
11. Don't touch the light or draw the power line when your hand was wet. And do not pull the electronic power line.
12. Maintain the distance at least 10M above from the equipment to the object.
13. This equipment does not have any parts can repair for the users, please do not open the equipment.
14. When the laser diode became dim or damaged please contact the dealer timely.
15. To use the original package when transport again and to avoid shake.

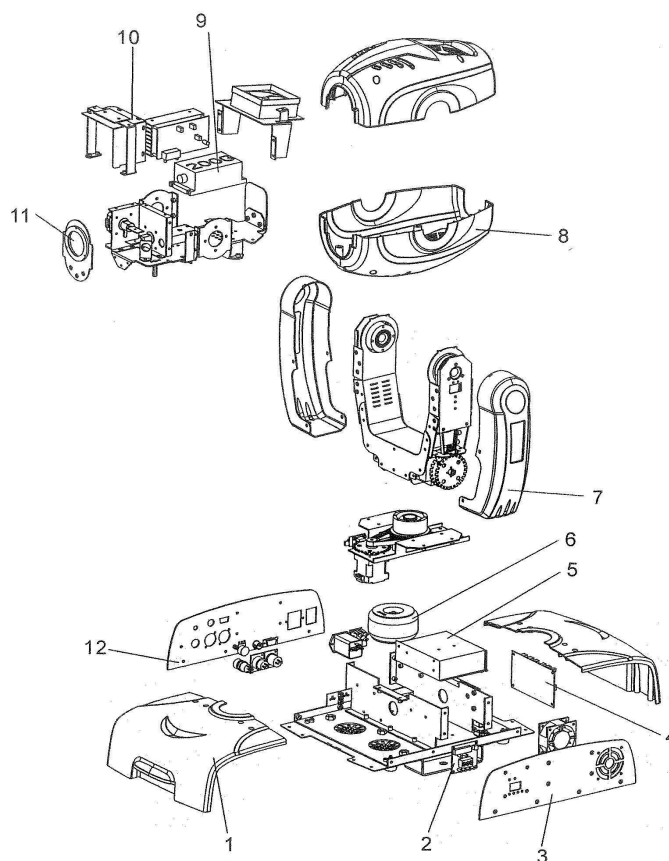
4.Warning

1. Don't look the light directly to prevent make some destroy with eyes..
2. Keep the space between light equipments and the lighted things more than 10 meter.

5. Dimensions

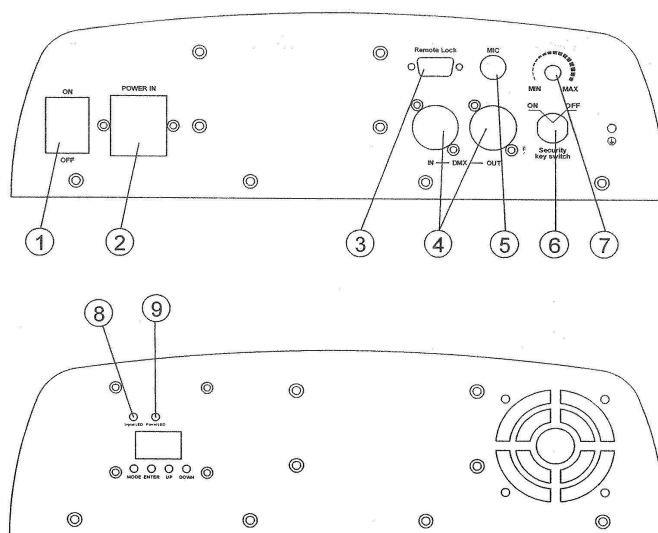


6. Structure of the fixture



1	Base cover	7	Arm
2	Display PCB	8	Top cover
3	Back panel	9	Green laser diode
4	Main PCB	10	Dustproof cover
5	power supply of laser diode	11	Front glass
6	Transformer	12	Front panel

7. Control board instruction

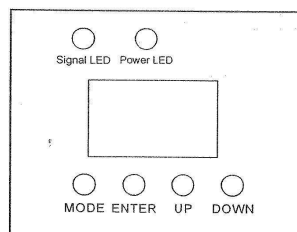


1	POWER ON/OFF: Power switch
2	POWER IN: Power cord, fuse inside
3	Remote Lock: In the event of removal, laser will not emit any beam.(E.U. IEC regulation)
4	DMX IN/OUT: International standard DMX512 signal input/output
5	MIC: Sound receiver
6	Security key switch: Power switch
7	MIN—MAX: Sound control
8	Signal LED: Signal LED
9	Power LED: Power LED

8. Control board operation

Control board operating way:

1. MODE: Select working mode or back to upper menu, normally there are 5 modes, but actually there are 6 modes, the TEST mode is hidden when we donot use it..
2. UP & DOWN: select the work status and setting the DMX address.
3. ENTER: confirm setting or subordinate menu.
4. When you reading other work mode or status without press ENTER, after stop operating for 10 about seconds, the display will return to the current working status.
5. Power on the unit, it will work under the current working status.



Control Board Operation Way:

Mode	Functions	Work status	Instruction
<i>PAN/P.rE</i>	Press UP & DOWN to select PAN(normal direction)/ P.rE (Invert direction)	<i>PAN</i> Normal direction	
		<i>P.rE</i> Invert direction	
<i>t.rE/t.rE</i>	Press UP & DOWN to select til(normal direction)/ t.rE (Invert direction)	<i>t.rE</i> Normal direction	
		<i>t.rE</i> Invert direction	
<i>rSt</i>	Reset the unit, confirm press ENTER	Reset	After resetting, the display will stay on the mode without any confirm of working status
<i>001—512</i>	Press UP & DOWN to select the needed DMX address, press ENTER to confirm.	Showing the current address	
<i>rUN/SOU/OFF/SLU</i>	Press UP & DOWN to select working mode (Run/Sou/OFF/SLa) press ENTER to confirm.	<i>rUN</i> Auto-Run	
		<i>SOU</i> Music-active	
		<i>OFF</i> DMX mode	
		<i>SLU</i> Slave mode	
<i>dot</i>	Test mode	One beam of light	Generally, this mode willnot be showed on the display board (This mode is for the professional to test the unit)
Remark: If you need the test mode to test the unit, press ENTER when you see 【rSt】 on the display board, then pressing DOWN for more than 10 seconds, then power off the unit and power on it again, then you will see the 【dot】 mode. If you want to hide the 【dot】 mode, press ENTER when you see 【dot】 on the display board, then pressing DOWN for more than 10 seconds, then power off the unit and power on again, then you will not see the 【dot】 mode.			

9. DMX512 operate

The fixture has 10 international DMX512 channels. Function details as following:

Channel		DMX512 Value	Function
1	Pan	0~255	Clockwise 540° rotate
2	Tilt	0~255	Anti-clockwise 265° rotate
3	Pan fine	0~255	Fine control of tilt movement
4	Tilt fine	0~255	Fine control of tilt movement
5	Control mode	0~51	DMX mode
		52~101	Music active
		102~153	Automatic mode
		154~205	Manual mode
		206~255	Reset
6	laser on/off	0~127	Black-out
		128~255	Open
7	Gobo	0~255	(0~255)/13=(0~19)20 gobos
8	Roll	0~63	No roll
		64~127	Horizontal roll
		128~191	Vertical roll
		192~255	Horizontal & Vertical roll
9	Rotaton	0~127	No rotation
		128~255	Rotation
10	Speed	0~255	(0~255)/22=(0~11)12grade speed

10. Specification

- Voltage: AC220V~240V, 50/60Hz
- Total power: 120W
- Condition temperature: 0~+35°C
- Laser light power: Green Laser Class 3 532nm
- Working Mode: DMX512, Auto, Music-active & Master/slave
- Net weight: 14 kg
- Dimension: 380 x 290 x 515 mm

11. Maintain

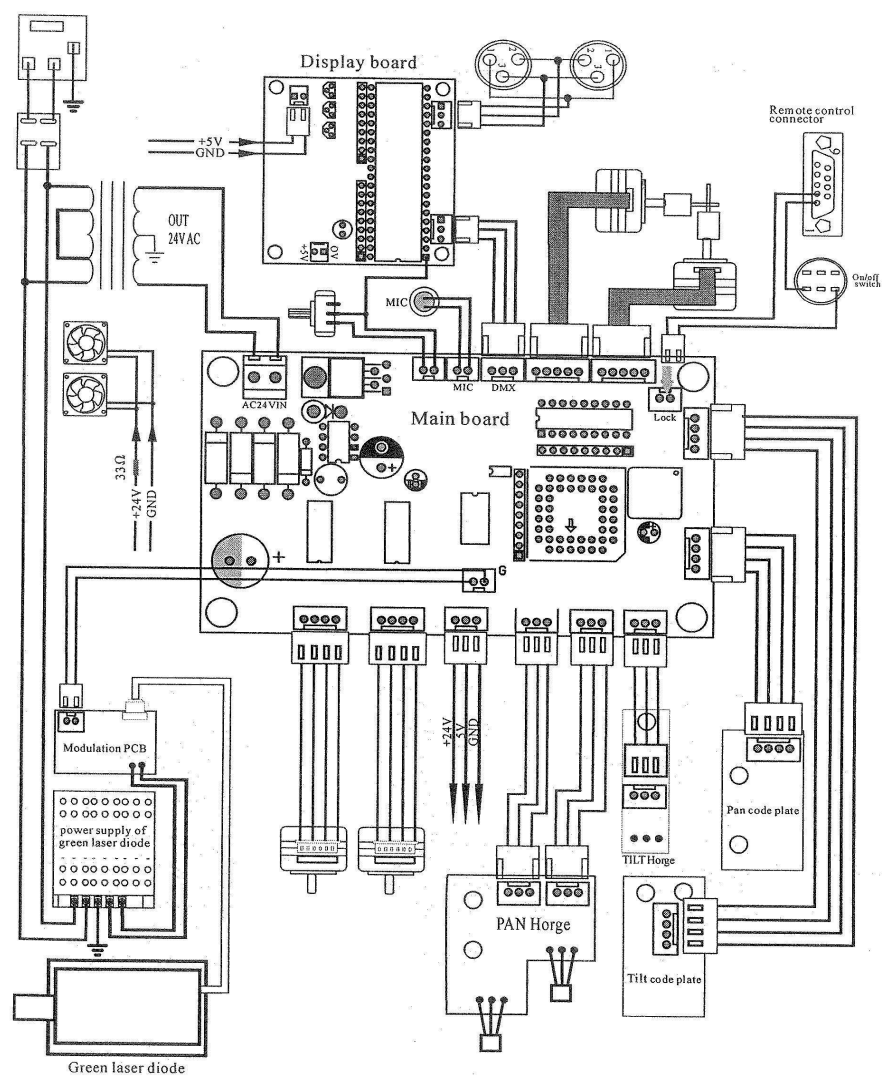
- Maintenance should be performed every 15-day period, by using a sponge which is dipped with alcohol, rather than wet cloth or other chemical liquid, to clean the mirror.
- Warning: Power must be disconnected before maintenance or repair. Do not look at the light source directly.

ATTENTION: DISCONNECT INPUT POWER BEFORE MAINTAIN.

DON'T LOOK STRAIGHTLY AT THE LIGHT SOURCES.

NOTE: Don't separate laser machine from laser power and repair them by yourself otherwise no good repair service will be supplied.

12. Electrical diagram



13. Trouble shooting

Problem	Caustion	Solution way	Series number
No power	Fuse broke	Fuse	09-00-2001-01
	Transformer broke	Transformer	06-01-BH039-00
The moter working abnormally	Main board broke	Main board	26-2A-MC-01MA-00
	Main board IC broke	Main board IC	00-STC89C54RD-00
	Motor broke	Motor	15-00-0099-00
X&Y axis motors no power	X/Y Motor broke	Motor	15-00-0101-00
	Main board broke	Main board	26-2A-MC-01MA-00
	Main board IC broke	Main board IC	00-STC89C54RD-00
	Display board broke	Display board	26-2A-MCDI-00
	Display board IC broke	Display board IC	00-STC89C52RC-00
No beam or beam dim or beam can't close, but other functions OK	Dirty lens	Please refer to the user manual for further instruction	
	Control mode setting incorrect	Please refer to the user manual for further instruction	
	Laser diode broke	Green laser diode	07-01-0200-04
	Main board broke	Main board	26-2A-MC-01MA-00
	Switch lock broke	Switch lock	08-00-0002-00
	Remote control plug broke	Remote controlplug	
No control	Control mode setting incorrect	Please refer to the user manual for further instruction	
	Display board broke	Display board	26-2A-MCDI-00
	Display board IC broke	Display board IC	00-STC89C52RC-00
	Main board broke	Main board	26-2A-MC-01MA-00
	Main board IC broke	Main board IC	00-STC89C54RD-00
	Internal wires are disconnected	Check the DMX cable	

EU- Declaration of Conformity



We hereby confirm that the following device

Laserworld CS-300G MH

complies with the essential safety requirements, laid down in the regulations of the committee to assimilate the provisions of law of all participating EU states on the electromagnetic compatibility (98/336/EWG).

The device has been classified considering the following EU-norms on electromagnetic compatibility:

DIN EN 55103-1: 1996

DIN EN 55103-2: 1996

DIN EN 61000-3-2:2000 + A2: 2005

DIN EN 61000-3-3:1995 + A1: 2001

Assessment of compliance of the product with the requirements relating to the Low Voltage Directive (LVD) was based on the following standards:

DIN EN 60065 : 2002

Furthermore, the device is verified in correspondence to the laser class regulations DIN EN 60825-1, if properly set up according to the upper mentioned laser safety regulation. After installing the device, an inspection and official approval is indispensable for the overall setup. The inspection must follow the european guidelines EN 60825-1 and corresponding regulations for the prevention of accidents BGV-B2.

This declaration is executed on behalf of the CS-300G MH Laser manufacturer.

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